

# Comparisons of Job Characteristics

Focus Occupation: **Pipelayers (47-2151)**

Associated Occupation: **Plumbers, Pipefitters, and Steamfitters (47-2152)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Pipelayers (47-2151)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	17.0	8.1	<<	Extensive education and/or training may be required
Building and Construction	4.0	16.6	6.9	<<	Extensive education and/or training may be required
Design	5.2	11.2	3.5	<<	Extensive education and/or training may be required
Mathematics	9.2	11.0	5.6	<<	Extensive education and/or training may be required
Physics	4.3	9.6	3.1	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	9.1	2.4	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Pipelayers (47-2151)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation and Control	5.4	8.7	9.2	0	Current skill level may be sufficient
Quality Control Analysis	5.9	8.7	8.2	0	Current skill level may be sufficient
Repairing	3.4	8.4	7.3	<	A higher skill level may be required
Troubleshooting	4.5	8.4	7.5	<	A higher skill level may be required
Equipment Maintenance	3.5	7.5	6.7	<	A higher skill level may be required
Equipment Selection	3.3	6.0	6.4	0	Current skill level may be sufficient

Installation	1.7	5.5	3.7	<<	Extensive development of skills in this area may be required
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 88			
Focus Occupation: Pipelayers (47-2151) Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.8	10.1	<	Some improvement in abilities may be required
Extent Flexibility	4.8	11.5	8.5	<<	Extensive improvement in abilities may be required
Visualization	7.5	11.2	7.5	<<	Extensive improvement in abilities may be required
Finger Dexterity	7.6	11.1	7.6	<<	Extensive improvement in abilities may be required
Multilimb Coordination	6.0	11.1	8.6	<	Some improvement in abilities may be required
Gross Body Equilibrium	3.2	8.0	3.8	<<	Extensive improvement in abilities may be required
Gross Body Coordination	3.9	7.4	4.5	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	6.3	4.2	<<	Extensive improvement in abilities may be required
Spatial Orientation	2.7	5.8	4.0	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 94
<b>Focus Occupation: Pipelayers (47-2151)</b> <b>Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)</b>		
Work Activities	Exclusivity of Activity	
Adhere to safety procedures	12	
Apply adhesives, caulking, sealants, or coatings	45	
Assemble and install pipe sections, fittings, or plumbing fixtures	71	
Build or repair structures in construction, repair, or manufacturing setting	54	
Cut, shape, fit, or join wood or other construction materials	58	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install underground storm, sanitation, or water piping systems	99	
Lay out piping systems	99	

Move or fit heavy objects	8
Operate power driven pumps	66
Perform safety inspections in construction or resource extraction setting	46
Read blueprints	10
Read specifications	23
Read tape measure	41
Read technical drawings	7
Understand construction specifications	53
Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use basic plumbing techniques	72
Use building or land use regulations	65
Use combination welding procedures	68
Use hand or power tools	2
Use hazardous materials information	35
Use measuring devices in construction or extraction work	41
Use pipe fitting equipment	80
Use pressure gauges	76
Verify levelness or verticality, using level or plumb bob	72
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 93

**Focus Occupation: Pipelayers (47-2151)**

**Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)**

Tools and Technologies	Exclusivity
Aerial lifts	13
Cleaning equipment	11
Compressors	9
Computer printers	2
Computers	1
Content authoring and editing software	1
Dispensing tools	6
Drilling and operation machinery	29
Earth moving machinery	11
Electrical measuring and testing equipment	7
Face and head protection	7
Forming tools	2
Gas analyzers and monitors	10
Holding and clamping tools	3
Indicating and recording instruments	2
Ladders and scaffolding	6

Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Measuring and layout tools	3
Metal bending and forming machinery	17
Pneumatic tools	8
Power generators	16
Power tools	2
Pressure measuring and control instruments	10
Prying and bending tools	10
Pumps	9
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Tool attachments and accessories	12
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.